response to viruses. These may increase the susceptibility to disseminated neonatal HSV disease.

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Detection of Parechovirus (P) and Enterovirus (E) Among Infants Evaluated for Late-Onset Sepsis in the Neonatal Intensive Care Unit (NICU): The VIRIoN-P-E Study (Board 533)

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Info

Background:
Limited data exist on the role of human parechoviruses (HPeV) and enteroviruses (EV) as causes of late-onset sepsis (LOS) in the NICU.

Objective:
To determine the frequency of detection of parechoviruses and enteroviruses among infants >72 hr of age who were evaluated for LOS in 2 academic NICUs (Parkland Memorial Hospital [PMH], Dallas -shared bays; Women & Infants Hospital [W&I], RI -single patient rooms)

Design/Methods:
Prospective cohort study of inborn infants hospitalized in the NICU at PMH and WIH from 1/2012 to 1/2013 and were enrolled in the Viral Respiratory Infections in the Neonatal Intensive Care Unit (VIRIoN-I; *J Pediatr* 2014:165:690). Eligible subjects were infants of all gestational ages (GA) and birth weights (BW) who were >72 hrs of age, remained in the NICU since birth, and underwent evaluation with initiation of antibiotic therapy for suspected LOS. Nasopharyngeal specimens were obtained within 72 hrs of the sepsis evaluation using flexible flocked nylon swabs that were placed in universal transport medium and frozen at -80°C until tested for parechovirus and enterovirus RNA by polymerase chain reaction (PCR) assay (Virology Laboratory, Nationwide Children's Hospital, Columbus, OH). Demographic, clinical, laboratory, and radiographic data were obtained.

Results:
Of the 100 infants enrolled in the VIRIoN-I study, nasopharyngeal specimens were available from 65 (59, PMH; 6, WIH) for parechovirus and enterovirus PCR testing. These 65 infants (38, male; 27, female; 49, Hispanic; 6, white; 9, Black; 1, unknown) had a mean ±SD gestational age of 30 ± 5 wks and birth weight of 1619 ± 929 g, and received empirical antibiotics for possible LOS. Infants had a total of 94 sepsis evaluations (65, 1 evaluation; 16, 2; 8, 3; 4, 4) at a mean age of 20 days. Reasons for the sepsis evaluations included fever (9), hypothermia (65), apnea (50),

feeding intolerance (51), seizure (1), irritabilitiy (5), emesis (20), diarrhea (1), bloody stool (5), rhinorrhea/congestion/cough (6), and lethargy (9). Four infants died. None of the infants had parechovirus or enterovirus detected in nasopharygeal specimens either at the first or subsequent sepsis evaluations.

Conclusion(s):
The burden of disease due to parechovirus and enteroviruses among inborn infants who remain in the NICU since birth appears to be low in those evaluated for LOS. Larger, prospective studies are needed to fully determine their contribution to “culture-negative” sepsis in the NICU.

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Hepatitis C Virus Testing of Mothers of Newborns with Neonatal Abstinence Syndrome (NAS): Improvement Needed! (Board 534)

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Info

Background:
Hepatitis C virus infection is a major public health problem among pregnant women in Ohio. Timely and targeted testing of at-risk women is recommended for optimal identification of exposed infants.

Objective:
To determine the prevalence of hepatitis C virus infection among mothers of newborns with NAS and identify gaps in optimal testing of mothers during pregnancy and delivery

Design/Methods:
Newborns with Neonatal Abstinence Syndrome (NAS) admitted to the neonatal intensive care units (NICUs) at The Ohio State University Wexner Medical Center and Nationwide Children’s Hospital (NCH) from 9/16 to 9/18 were identified by review of the NCH NAS database. Pertinent demographic and clinical data were obtained from both mother and infant that included dates of maternal hepatitis C virus testing.

Results:

349 infants were admitted to the NICU due to NAS, and preliminary data are available for 60 infants born to 59 mothers. Of the 59 mothers, 32 (54%) had hepatitis C virus infection documented before or during pregnancy. Seven (12%) of the 59 mothers were never tested either before or at delivery. Of the remaining 20 mothers, 9 (45%) were tested at delivery while 11 (55%) had a negative hepatitis C antibody test early in pregnancy but not retested at delivery